



PATENT ABSTRACTS OF JAPAN

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(54) OPTICAL TRANSMISSION LINE**(57) Abstract:**

PURPOSE: To decrease the connection loss of optical fibers so that the length of a transmission path is extended by constituting the titled line in such a manner that the connection of the optical fibers is executed by connecting means for connecting the optical fiber of larger core diameters to the optical fibers of the smaller core diameters.

CONSTITUTION: The connection of the optical fibers is executed by the connecting means for connecting the fibers from the optical fibers of the larger core diameters to the optical fibers of the smaller core diameters. Fibers 11, 12... having the core diameters changing to a tapered shape are used as the connecting means for connecting the optical fibers of the different core diameters by connecting many single mode optical fibers 1, 2, 3... which are slightly different from each other in the effective core diameter. The propa-

gation of optical solution which is ultrashort light pulse for a long distance without changing the width thereof is thereby permitted and the propagation speed of an optical communication system is remarkably improved.

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